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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/668,776	09/23/2003	Tapio Kuiri	KOLS.056PA	3302

7590 10/20/2006
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EXAMINER

JACKSON, BLANE J

ART UNIT	PAPER NUMBER
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2618

DATE MAILED: 10/20/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/668,776

Applicant(s)

KUIRI, TAPIO

Examiner

Blane J. Jackson

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 August 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 7-10, 14, 16 and 17 is/are allowed.
- 6) ☒ Claim(s) 1-3, 5, 11-13 and 15 is/are rejected.
- 7) ☒ Claim(s) 4, 6 and 13 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 September 2003 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- ☐ Notice of Informal Patent Application
- ☐ Other: _____.

DETAILED ACTION

Response to Arguments

Applicant's arguments with respect to claims 1-3, 5, 11, 12 and 15 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-3, 5, 11, 12 and 15 are rejected under 35 U.S.C. 102(e) as being anticipated by Puknat et al. (US 6,708,044).

As to claims 1, 11 and 15, Puknat teaches a controlling method and a mobile station of a cellular telecommunications system comprising:

An integrated phase locked loop for generating output frequencies (figures 5 and 7, column 12, lines 1-9, dual band mobile telephone or transceiver unit (500) with PLL frequency synthesizer (550)),

A frequency control unit for providing a frequency control word for the phase locked loop according to which frequency control word an output frequency is generated

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(figure 5, column 13, lines 1-22, controller (505) provides a frequency data word (PLL... Data) to PLL to implement a frequency change of the PLL),

A tuning unit for providing a synchronized tuning word for the phase locked loop, the tuning unit being configured to output the synchronized tuning word into the phase locked loop in synchronization with the output of the frequency control word (figures 3 and 5, column 14, lines 13-31, latch plus logic circuits (300) or logic unit (572) determines a band select output data word to the VCO of the PLL as triggered by the (RF... Band) control data word from the controller (505). The switching of the specific band circuitry occurs during the frequency synthesizer's tuning to the appropriate local oscillator frequency).

As to claim 2, Puknat teaches the phase locked loop includes an integrated voltage controlled oscillator for generating the output frequency proportional to a voltage level inputted into the voltage controlled oscillator wherein the tuning unit is configured to output the synchronized tuning word into the voltage controlled oscillator (figure 5, column 14, lines 13-31, logic unit (572) with output to VCO (592) for frequency band change).

As to claim 3 with respect to claim 2, Puknat teaches the voltage controlled oscillator includes a tuning circuit for providing a plurality of frequency tuning configurations, a frequency tuning configuration contributing to frequency characteristics

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of the voltage controlled oscillator (figure 5, VCO (585), PLL (565), logic (572) and filter (582)) and

The tuning unit is configured to output the synchronized tuning word for the tuning circuit in order to set a frequency tuning configuration (column 12, lines 30-50, logic circuit (572) controls VXO (585) via signal line (573) and in conjunction with PLL (565) to drive a first or second cellular band of operation).

As to claim 5 with respect to claim 1, Puknat teaches the phase locked loop includes a feedback divider connected to the frequency control unit, the feedback divided being configured to generate a feedback signal with frequency proportional to a frequency control word and the frequency control unit is configured to output a frequency control word into the feedback divider (figure 5, column 13, lines 1-17, PLL (565) includes the necessary divide by circuit and receives the frequency data word to complete the phase lock loop utilizing VCO (565) and filter (582)).

As to claim 12 with respect to claim 11, Puknat teaches including outputting the synchronized tuning word into one element selected from the group including a voltage controlled oscillator of the phase locked loop, a charge pump of the phase locked loop (figure 5, column 12, lines 30-42, VCO (585)).

As to claim 15, Puknat teaches a method according to claim 11, further including outputting the synchronized tuning word simultaneously with the frequency control word

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(column 12, lines 30-42, VCO band is controlled by the logic circuit (572) in conjunction with the PLL control word to determine the VCO output frequency).

Allowable Subject Matter

Claims 7-10, 14, 16 and 17 are allowed.

Claims 4, 6 and 13 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Blane J. Jackson whose telephone number is (571) 272-7890. The examiner can normally be reached on Monday through Friday, 8:00 AM-5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Urban can be reached on (571) 272-7899. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to be "P. J. [unclear]", is located below the text.